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Mr. McCrory is on an inspection trip during which he will visit the cotton ginning laboratory at Stoneville, Miss., and the work in progress at Ames and Iowa City, Iowa. He will return to Washington about March 1.

In connection with the farm land development project G. R. Boyd recently made a trip by automobile over territory between the Mississippi River and Washington.

The Advisory Committee for the college section of the A.S.A.E. will meet in Washington March 5-7.

At a conference between G. A. Mitchell and Dr. William Rudolph in charge of the sewage disposal laboratory at New Brunswick, N.J., it was brought out that 50 years' experience with sewage irrigation in cities all over the world had showed that no disease traceable to sewage-irrigated crops had been reported.

One pumping plant in the Pelican Lake District, Florida, according to B. S. Clayton, pumped an average depth of 22.1 inches from a watershed of 2,710 acres during November and December, 1932. The amount pumped was 91 per cent of the rainfall. Nearly all the rain occurred during one storm period in November.

Field work on the rehabilitation study of the Little River Drainage District of southeast Missouri, conducted by L.A. Jones and G. R. Shier, has been completed. The district is the largest in the United States, comprising about 450,000 acres. A report covering this investigation is being prepared.

D. L. Yarnell is setting up apparatus for testing the flow of water around bends. Bends of different sizes and curvature have been constructed of pyrolin. Hydraulic losses will be determined and direction of flow observed. Mr. Yarnell's report on Flow Through Pile Trestles has been approved for publication by the University of Iowa.

An experiment on the Pullman project in 1932, as reported by P. C. McGrew, indicates a greater amount of run-off from the gentler slopes than from the steeper slopes due to the fact that a large part of the year's run-off came from melting snow which accumulates to a greater depth on gentle slopes than on steep slopes. In 1932 the run-off in inches from two comparable terraces on land having slopes of 14.5 and 23.5 per cent was 4.23 and 1.64 inches respectively.

Sixteen terraces have been completed by H. O. Hill on the Chapman land near Temple, Texas, which was recently rented for comparison of the cost of farming parallel to and across terraces. Six of these terraces were built with teams and fresnos, two with a Martin ditcher, and the remainder with a 75-horsepower Monarch tractor and 12-foot blade grader,

to obtain comparative data on the cost of terrace construction with different implements.

The Aetna Life Insurance Company which has been terracing farms taken over through foreclosure proceedings reported to C. E. Ramser that it is so well satisfied with the results that a 50 per cent increase in acreage to be terraced in 1933 has been ordered. That insurance companies holding land in Oklahoma are greatly interested in terracing is evidenced by the fact that representatives of ten such companies attended a terracing school at Durant, Okla., held by the Extension Service of the Oklahoma A. and M. College during November.

An illustrated lecture on terracing and erosion control was delivered by R. A. Norton at a farmers' night school at College Springs, Iowa. The meeting was attended by about 75 farmers.

A. T. Holman attended the Annual Short Course for Farmers at Ames, Iowa, on February 8 and 9 and gave an illustrated talk on the nature, progress and results of engineering experiments on the Bethany farm. About 400 farmers attended the meeting.

On February 2 H. S. Riesbol gave an illustrated talk on terrace machinery and construction costs at the Logan County Soil Conservation Meeting held in Guthrie, Okla.

Publication of the final 1930 Census reports for irrigation and drainage has been announced by the Bureau of the Census. Each volume includes a series of State bulletins and a summary bulletin, issued in 1931-2, together with heretofore unpublished tables. P. A. Ewing had charge of the preparation of the volume for irrigation, and B.S. Clayton of the drainage volume as well as the work upon which they were based.

Arrangements are being made to install, in one of the mountain water supplies of Salt Lake City, a sand trap developed at Fort Collins. This will be the first installation in a city supply.

A number of Parshall measuring flumes have been installed on one of the largest ranches in southern California. All irrigation water on this property is measured to the different crops and fields, and the cost of the water charged to the separate fields. The Parshall flume is being used in increasing numbers in Hawaii.

"Comparison of the Evaporation from Different Types of Pans" is the title of a paper prepared by Carl Rohwer upon request of the committee on Irrigation Hydraulics of the American Society of Civil Engineer, for publication in the February issue of the Proceedings of that Society.

Observations made by L. T. Jessup on Kootenai Valley, Idaho, soils, bear out conclusions reached by other investigators that organic soils continue to subside for many years after reclamation. The drained fens of England, apparently continue to subside indefinitely. With reference to the Kootenai Valley, a study based on the Jones-Ramser survey of 1915, the U.S.G.S. topographic survey of 1928, and the U.S.G.S. observation well elevations, 1930, indicated that land reclaimed about 1926 had subsided on the average about 1.5 feet by 1928 and 0.4 foot additional by 1930.

O. W. Israelsen completed a report covering the 1932 studies under the project "Drainage and Irrigation Management of Lands Overlying an Artesian Basin." A general discussion of the results of work on this project together with final conclusions are now being prepared by the Utah

Station committee in immediate charge of the project. The discussion of the conclusions, together with the report of the 1932 studies, will be published by the Utah Agricultural Experiment Station.

The evaporimeter has been useful in recording small evaporation losses following rain storms, according to Colin A. Taylor, who states that sufficient records have been collected with the shallow black pan evaporimeter to raise some question about the value of atmometer records as a field index of transpiration. Atmometers exposed at the same location as the evaporimeter in Coldwater Canyon, southern California, showed a loss during the period October 17 to November 21, 1932, that was 91 per cent of the midsummer peak whereas the loss from the evaporimeter for the same period was only 60 per cent of the midsummer peak. It is planned to investigate this matter further. The evaporimeter was designed by E. J. Hoff of the Division of Irrigation, now retired.

Report for a technical bulletin on "Irrigation Requirements of the Arid and Semiarid Lands of the Pacific Coast Basins," which was begun by Dr. Samuel Fortier prior to his retirement, has been completed by A. A. Young.

Chas. A. Bennett and Russell G. McWhirter have returned from Sacaton, Arizona, where they were engaged in some experimental roller ginning tests on Pima cotton, in cooperation with the Bureau of Plant Industry. On February 1, 1933, Mr. Bennett read a paper entitled "Some Results of Cotton Ginning Investigations" before the joint session of the Section of Agronomists and Agricultural Engineers of the Southern Association of Agricultural Workers at New Orleans.

A paper entitled "National Program of Plow Investigations" by R. B. Gray was presented at the meeting of the Southern Section of the A.S.A.E. at New Orleans, February 3. Mr. Gray spent several days at Toledo in connection with the gasoline and alcohol fuel consumption tests and in conferring on corn borer control matters.

A paper on mechanical blocking and mechanical harvesting of sugar beets was presented by E. M. Mervine before the Mountain States Implement Dealers Association at Denver, Colo. on January 18. This association is composed of dealers from the States of Wyoming, Nebraska, Colorado and New Mexico.

E. D. Gordon reports that the construction of an experimental forage drier that will have two heated crushing rolls is nearing completion. The arc of contact of the forage against the heated roll is 120°. The entire assembly will be enclosed so that temperatures, humidity, and gas conditions can be controlled.

A series of fuel consumption tests on motor equipment have been made at the Toledo headquarters using various mixtures of ethyl and denatured alcohol and gasoline. The tests were made using 1/2-ton, 1-1/2-ton, and 3-1/2-ton trucks on the highway, and using McCormick-Deering and John Deere tractors belted to a Prony brake.

Further tests on stationary engines are being conducted at the Engineering Experiment Station of the Navy at Annapolis, by A. H. Senner and W. R. Humphries.

An informal talk on corn picker tests was made by C. K. Shedd during the Farm and Home Week at Iowa State College, Ames.

E. M. Dieffenbach at Albany, Ga., is constructing a focal-plane shutter arrangement whereby he is enabled to secure a permanent record of the spray pattern of spray nozzles in connection with pecan spraying.

A mimeographed report "Machine Placement of Fertilizers Applied to Snap Beans in Florida, 1931" by G. A. Cumings, et al., is now available. Placement of fertilizer either in a band 2 or 4 inches to each side of and 1.5 inches below the level of the seed or in a band 3 inches under the seed gave the highest yields. No plants appeared when the fertilizer was placed in contact with the seed. Inferior results were obtained with placements on the surface of the ground, 1 inch under the seed, or mixed with the soil under the seed.

A cooperative study of fertilizer placement for tobacco will be undertaken in several of the Southeastern States this season in connection with our general study of fertilizer distributing machinery. A transplanter with suitable attachments will be furnished and operated by representatives of the Division of Mechanical Equipment.

G. A. Cumings prepared a paper entitled "Cooperative Fertilizer Placement Tests with Cotton in Seven States 1932" which was presented at the Agronomy Section of the Southern Agricultural Workers at New Orleans February 2.

Silica gel when mixed with damp grain will reduce the moisture content of the grain from 8 to 10 per cent in 24 hours, according to tests made by W. M. Hurst and W. R. Humphries at Arlington Farm. The data indicate that silica gel will absorb from 20 to 30 per cent of its weight of water when mixed with grain having an initial moisture content of 20 per cent. The physical properties of silica gel are not changed by the absorption of moisture. The silica gel can be separated from the grain with a grain cleaner of the type used on farms or in terminal elevators.

The Division of Structures has begun a test of the application of unit heaters to greenhouse heating, in comparison with standard type coil radiation. The experiment will also furnish basic data as to heating requirements of greenhouses.

The transportation test of a shipment of apples from Wenatchee, Wash. to New York last month, in which W. V. Hukill participated, proved unusually successful in that temperatures as low as 38°F. below zero were encountered on the trip. During 5 days of the time the temperature did not go above zero. The train was stranded in a snow storm at Stanley, N. Dak., for 24 hours during which time the temperature reached 16° below zero with a high wind blowing. Two cars were started with wet saw dust on the floor in lieu of artificial heat but this did not prove sufficient and it was necessary to place stoves in these cars. There was slight freezing in some of the cars but on the whole the shipment came through in good shape. Cars in which the heaters were operated according to temperature inside the car required less fuel and apparently gave better results than those heated in the ordinary way. The final report on the cars will not be available until samples of various shipments have been stored for a month or more.

A report of tests on mechanical refrigeration on dairy farms from data secured during the past three summers is being prepared by J. R. McCalmont of this Bureau and R. P. Hotis of the Bureau of Dairy Industry.